Thursday, May 27, 2010

## Contract and Land Management RECOMMENDATION FOR COUNCIL ACTION

Item No. 23

**Subject:** Authorize negotiation and execution of professional services agreements with BLACK AND VEATCH CORPORATION, Austin, TX and AECOM TECHNICAL SERVICES, INC., Austin, TX for engineering services for the Walnut Creek WWTP and South Austin Regional WWTP Filter Improvements respectfully, in an amount not to exceed \$1,500,000 for each agreement, with a total authorization amount not to exceed \$3,000,000. Improvements for each of the facilities will be implemented as two separate engineering contracts with Black and Veatch assigned to Walnut Creek WWTP and AECOM assigned to South Austin Regional WWTP.

**Amount and Source of Funding:** Funding is available in the Fiscal Year 2009-2010 Capital Budget of the Austin Water Utility.

Fiscal Note: A fiscal note is attached.

**For More Information:** Ramesh Swaminathan 972-0244; Rosie Truelove 974-3064; April Thedford 974-7141

**Purchasing Language:** Most qualified two (2) firms out of nine (9) firms evaluated through the City's qualification-based selection process.

**MBE/WBE:** This contract will be awarded in compliance with Chapter 2-9B of the City Code (Minority Owned and Women Owned Business Enterprise Procurement Program) by meeting the goals with 15.80% MBE and 15.80% WBE subconsultant participation.

Boards and Commission Action: Recommended by the Water and Wastewater Commission.

The tertiary filters at both the Walnut Creek Wastewater Treatment Plant (WWTP) and the South Austin Regional Wastewater Treatment Plant (WWTP) serve as the final step in the wastewater treatment process before the plant effluent is discharged to the Colorado River. This final filtration stage is required to comply with Texas Commission on Environmental Quality (TCEQ) permit requirements that are enforced on both a daily average and annual average basis with the latter being more stringent. Further, both facilities feed the City's water reuse program which has placed additional effluent quality requirements on these systems. Both filter systems are currently functional and the plants routinely meet or exceed the effluent/discharge limits; however there are problems and issues that are both common and unique to each of the two treatment plants. Some of these issues include:

Walnut Creek WWTP: valves and actuators are workable but in need of replacement due to age and deterioration; the condition of the filter under drains is unknown and requires inspection and possible replacement; significant cavitations and other hydraulic issues impacting system performance are experienced during routine operation; the tertiary filter control system requires equipment upgrades and/or rehabilitation.

South Austin Regional WWTP: three of the twelve tertiary filters are currently inoperable mostly due to the condition of the valves and operators; of the operable filters, three to five exhibit continuous leakage at the inlet valves (despite preventative maintenance) and uneven flow levels during backwash refill due to

clogging; instrumentation and control systems require significant rehabilitation; system hydraulic limitations which cause overflow and flooding in the facility during high river level conditions; standing water in the piping gallery due to continuous leakage at the area of a structural expansion joint.

In order to address these and other critical issues, anticipated services for the recommended engineering firms shall include: Preliminary Engineering, Final Design, and Construction Phase and Warranty Phase Services for the Walnut Creek WWTP and South Austin Regional WWTP Tertiary filter improvements.

Improvements for each of the facilities will be implemented as two separate engineering and construction contracts. The top two (2) scoring firms have been selected to perform these engineering services, with one (1) firm assigned to each facility. Based upon the City's qualification-based evaluation process and subsequent recommendations from AWU, Black and Veatch will be assigned to Walnut Creek WWTP and AECOM will be assigned to South Austin Regional WWTP.

The deliverable products for both assignments are, at a minimum: Draft and final Preliminary Engineering Reports (PER) that presents recommended improvements complete with supporting data such as calculations, condition assessments, monetary and non-monetary evaluations performed for estimated life cycle and construction costs; Complete, detailed engineering documents and associated services required for the bidding and construction of the proposed improvements. Engineering documents shall be delivered for City review at 30%, 60%, 80% and 95% stages of completion; Design schedule, including the above noted progress milestones, updated monthly and submitted with each monthly payment application. The selected firms will also be required to develop and implement a QA/QC plan in conformance with requirements of the City.

This authorization provides for funding of services related to preliminary engineering assessment, design and construction phase services. The total funding authority for these services is \$3,000,000 with each of the two (2) firms receiving approximately \$1,500,000.

After sufficient engineering assessment, preliminary design and analysis has been performed by the selected firms, AWU will select the desired option(s) for filter improvements to each of the facilities. The construction costs associated with these improvements is estimated at \$10.5M for the Walnut Creek WWTP and \$9.5M for the South Austin Regional WWTP. Construction will proceed after the required funding is identified. This request allows for the development of professional service agreements with the recommended firms. Should the City be unsuccessful in negotiating a satisfactory agreement with a recommended firm, negotiations will cease with that firm. Staff will then return to Council and request authorization to begin negotiations with the alternate recommendation listed below.

RECOMMENDED FIRMS: AECOM Technical Services (for South Austin Regional WWTP); Black and Veatch Corporation (for Walnut Creek WWTP)

ALTERNATE FIRM: CP&Y (Chaing, Patel and Yerby), Inc. (for either facility)